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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,054	10/12/2001	Eishi Matsuda	KN-65-US	1008

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EXAMINER

CUNNINGHAM, TERRY D

ART UNIT	PAPER NUMBER
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2816

DATE MAILED: 04/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/975,054

Applicant(s)

MATSUDA, EISHI

Examiner

Terry D. Cunningham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to adequately disclose how to make and use the claimed circuit. The specification only discloses blank boxes for each of the elements 11-15. Further, the specification fails to adequately describe the operation of each of the disclosed elements. If elements having the broad text meanings were known in the art to have well known specific construction, then blank box only description is acceptable. However, since this is not the case, it is not seen that the invention is enabled. As an example, the figures show element 11 having the text label CONVERTER CIRCUIT, which is only describe as having the operation converting a DC voltage to a DC voltage. However, the specification in no way states the type or value of the output voltage of the converter. Since the specification fails to disclose any specifics concerning how to make and use the boxes shown in the figures, it is not seen that the specification adequately enables the specification.

Examiner has fully considered Applicant's remarks for the above rejection and has not found them to be persuasive. Applicant has merely added disclosure to state that the element is a

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“DC-DC converter” and that such “description would be appreciated by one skilled in the art”. However, this is not seen to affect the rejection. While the phrase “DC-DC converter” is well used in the art, it in no way provides any specifics and to what such is intended to comprise. There a massive amount of elements in the art, all having significantly differing structure, that are known as “DC-DC converters”. Without providing more specifics concerning exactly what this element is or what such is intended to do, it is not seen that one skilled in the art can make and use the invention without “undue experimentation”.

Claims 1-10 are rejected under 35 U.S.C. § 112, first paragraph, as based on a disclosure which is not enabling. With respect to claims 1-3, the “second differentiating circuit” and the “current injecting circuit” are deemed critical or essential to the practice of the invention, but is not included in the claim(s). With respect to claims 4-6, the “first differentiating circuit” and the “current absorbing circuit” are deemed critical or essential to the practice of the invention, but is not included in the claim(s). An arrangement lacking this feature is not enabled by the disclosure since it cannot be understood from the specification how the circuit will operate without such. *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Examiner has fully considered Applicant’s remarks for the above rejection and has not found them to be persuasive. Applicant states that “the recited elements alone are believed to be enabled”. However, Applicant fails to provide any justification whatsoever for this statement. It is not seen nor has Applicant established that the specification will enable one skilled in the art to make and use the invention with only the recited elements.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10 are rejected under 35 U.S.C. §102(b) as being anticipated by Doluca et al. (USPN 4,769,784). Doluca et al. discloses, in Figs. 2-3, a circuit comprising: “a DC-DC converter circuit (Fig. 3)”; “a first differentiating circuit (39 and 43)”; “a current absorbing circuit (45)”; “a second differentiating circuit (31 and 35)”; “a current injecting circuit (37)”; and “an output (19)”, all connected and operating similarly as recited by Applicant.

Examiner has fully considered Applicant's remarks for the above rejection and has not found them to be persuasive. Additionally, Applicant's remarks are not clearly understood. Firstly, a “charge pump” (e.g., as in Fig. 3) is notoriously well known and commonly referred to in the art as a “DC-DC converter”. Further, Applicant's remarks concerning elements 39,43 and 31,35 being “differentiated circuits” are not understood. Comparator circuits are well known and commonly referred to in the art as “differentiating circuits”. Clearly, the elements differentiate the difference between the voltage on the output 19 and VREF.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 703-308-4872. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 703-308-4876. The fax phone numbers for Technology Center 2800 are 703-872-9318 for Before Final communications and 703-872-9319 for After Final communications. Please note, any faxed paper clearly stating **DRAFT** or **PROPOSED AMENDMENT** at the top will be forwarded directly to the Examiner. All others will be treated as a formal response and acted upon accordingly.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-0956.

TC  
April 14, 2003

  
Terry D. Cunningham  
Primary Examiner  
Art Unit 2816